

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07722 D T-33-29

SILICON NPN EPITAXIAL TYPE  
(DARLINGTON POWER)**2SD549**

PULSE MOTOR DRIVE, HAMMER DRIVE APPLICATIONS.  
SWITCHING APPLICATIONS.  
POWER AMPLIFIER APPLICATIONS.

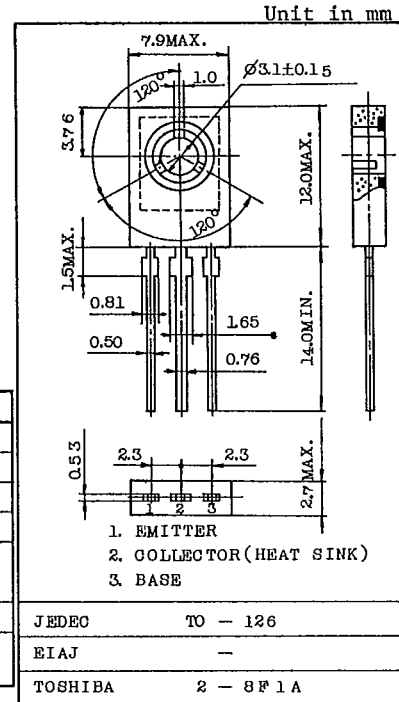
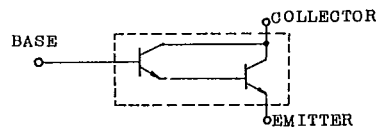
## FEATURES:

- High DC Current Gain  
:  $h_{FE}=4000(\text{Min.})$  ( $V_{CE}=2V$ ,  $I_C=150\text{mA}$ )
- Low Saturation Voltage  
:  $V_{CE(\text{sat})}=1.5V(\text{Max.})$  ( $I_C=1A$ ,  $I_B=1\text{mA}$ )

MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	30	V
Collector-Emitter Voltage	$V_{CEO}$	30	V
Emitter-Base Voltage	$V_{EBO}$	10	V
Continuous Collector Current	$I_C$	1.5	A
Collector Power Dissipation ( $T_a=25^\circ\text{C}$ )	$P_C$	1.0	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ\text{C}$

## EQUIVALENT CIRCUIT



Mounting Kit No. AC46C  
Weight : 0.72g

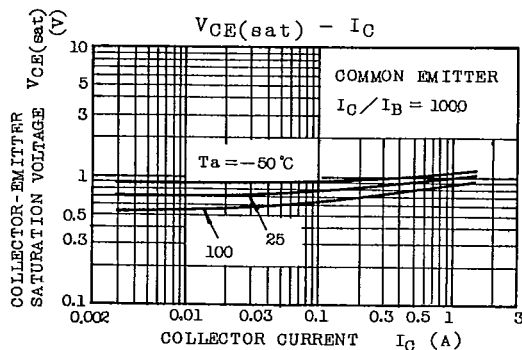
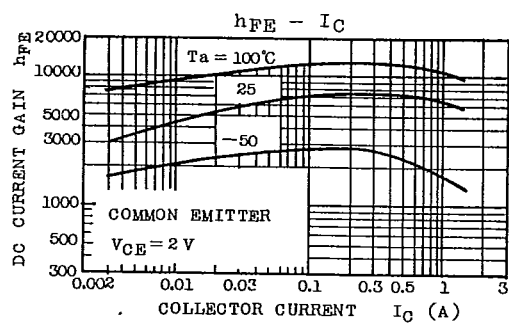
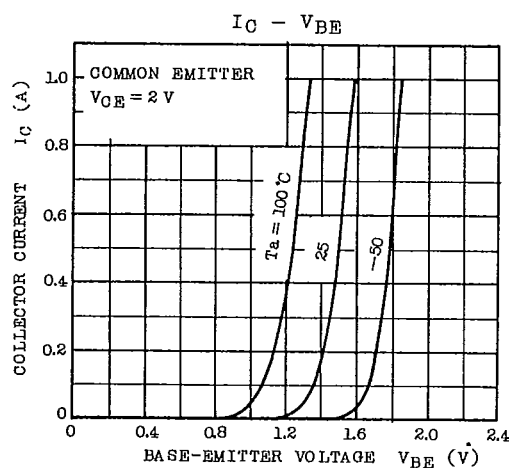
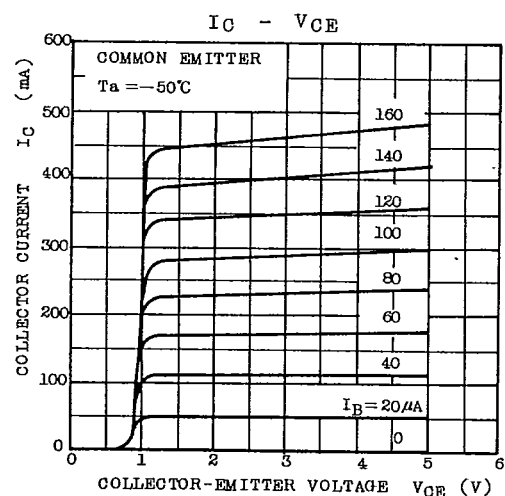
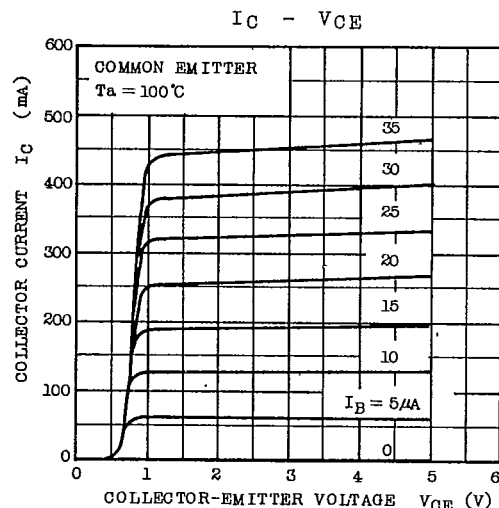
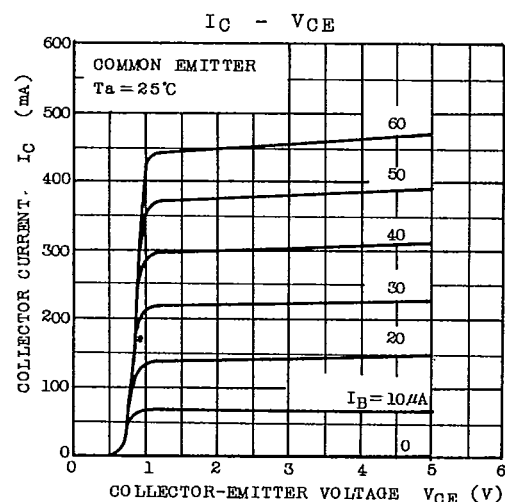
ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=30V$ , $I_E=0$	-	-	10	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=10V$ , $I_C=0$	-	-	10	$\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10\text{mA}$ , $I_B=0$	30	-	-	V
DC Current Gain	$h_{FE}$	$V_{CE}=2V$ , $I_C=150\text{mA}$	4000	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(\text{sat})}$	$I_C=1A$ , $I_B=1\text{mA}$	-	-	1.5	V
Base-Emitter Saturation Voltage	$V_{BE(\text{sat})}$	$I_C=1A$ , $I_B=1\text{mA}$	-	-	2.2	V
Switching Time	Turn-on Time	$t_{on}$	-	0.18	-	$\mu\text{s}$
	Storage Time	$t_{stg}$	-	0.6	-	
	Fall Time	$t_f$	-	0.3	-	

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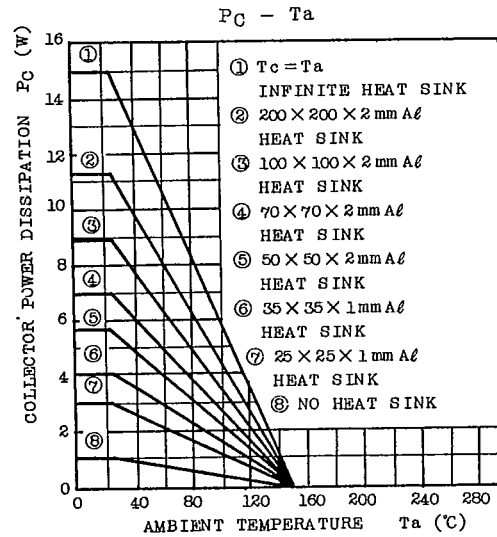
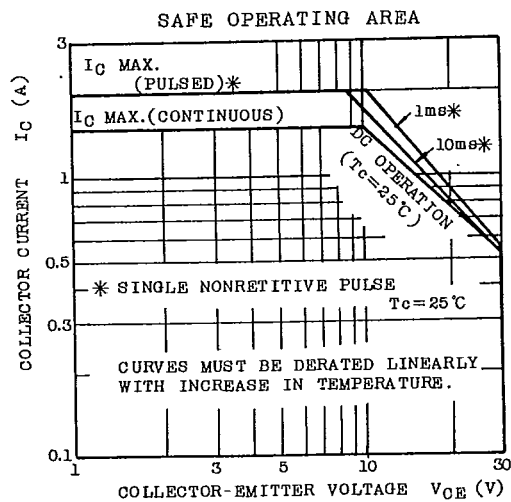
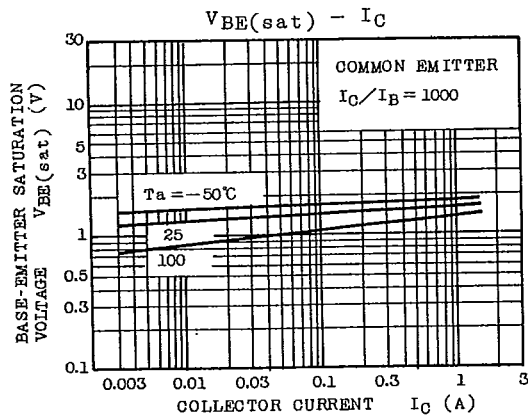
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